

C.) REMARKS

This Response is filed in response to the Office Action dated March 12, 2007.

Upon entry of this Response, claims 1-15 will be pending in the Application.

In the outstanding Office Action, the Examiner rejected claims 1, 3, 5, 10 and 11 under 35 U.S.C. § 102(b) as being anticipated by King (U.S. Patent No. 1,604,290) hereafter "King"; rejected claims 1, 7, 10 and 11 under 35 U.S.C. § 102(b) as being anticipated by Manicatide et al. (U.S. Patent No. 3,777,978) hereafter "Manicatide"; rejected claims 1, 4-6 and 8-10 under 35 U.S.C. § 102(b) as being anticipated by Waldrum (U.S. Patent No. 4,892,255) hereafter "Waldrum"; rejected claim 2 under 35 U.S.C. § 103(a) as being unpatentable over King; rejected claim 12 under 35 U.S.C. § 103(a) as being unpatentable over King, Manicatide or Waldrum and indicated claims 13-15 would be allowable if rewritten in independent form.

Claim 1 has been amended to clarify the invention, reciting a flexible conduit, the conduit having a second end sufficiently remote from the airborne craft for flow of the dispensed material to be substantially unaffected by an air stream associated with operation of the airborne craft. It is submitted that no new matter has been added by amended claim 1 because support for the claim can be found in the specification, *inter alia*, the figures and paragraph [0029].

Rejection under 35 U.S.C. 102

A. Rejection of claims 1, 3, 5, 10 and 11

The Examiner rejected claims 1, 3, 5, 10 and 11 under 35 U.S.C. § 102(b) as being anticipated by King.

Specifically, the Examiner stated that

King shows a dispersal system for fire suppression material for use with an airborne craft, the system comprising a vessel 4 holding fire suppressant, the vessel being secured within or adjacent to an airborne craft, a dispenser 21 for controllably dispensing the material from the vessel, and a conduit 19 having a first end secured in fluid communication with the vessel and a second end for controllably directing the dispensed material adjacent to ground level. King also shows a release mechanism (threads 18) as recited in claim 3.

Applicant respectfully traverses the rejection of claims 1, 3, 5, 10 and 11 under 35 U.S.C. § 102(b).

King, as understood, is directed to apparatus for distributing fire preventing and extinguishing composition from an airplane.

In contrast, independent claim 1 recites a dispersal system for fire suppression material for use with an airborne craft, the system comprising: a vessel holding at least one fire suppressant material therein, the vessel being secured within or adjacent to an airborne craft; a dispenser for controllably dispensing the at least one fire suppressant material from the vessel; and a flexible conduit, the conduit having a first end secured in fluid communication with the vessel and a second end disposed sufficiently remote from the airborne craft for flow of the dispensed material to be substantially unaffected by an air stream associated with operation of the airborne craft, the second end adapted for controllably directing the dispensed material adjacent to ground level. (emphasis added)

The examiner is reminded that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).” See Manual of Patent Examining Procedure, 8th Edition (MPEP), Section 2131.

In addition, “[t]he identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).” See MPEP, Section 2131.

Several of the features recited by Applicant in independent claim 1 is not taught or suggested by King. First, King does not teach or suggest a flexible conduit as recited by Applicant in independent claim 1, as amended. King teaches a nonmovable goose-neck extending from the posterior region of the tank connecting a spray nozzle to the tank (see Figures 1 and 3 and col. 2, line 104 through col. 3, line 13). The goose-neck must be nonflexible to nonmovably support the linkage controlling a valve that provides fire preventing and extinguishing composition to the spray nozzle. In addition, were the goose-neck flexible, the spray nozzle would flutter in the air stream during operation of the airplane. Second, King does

not teach or suggest a second end of a conduit disposed sufficiently remote from the airborne craft for flow of the dispensed material to be substantially unaffected by an air stream associated with operation of the airborne craft. The apparatus of King that is conformally formed about the fuselage of the airplane and the spray nozzle fixedly extends from the apparatus, wherein the nozzle is adjacent to the airplane. Further, any resulting spray dispensed from the spray nozzle would be significantly affected by a resulting air stream produced by virtue of airplane operation. In contrast, paragraph [0029] of the present invention discloses an approximate range of length of conduit, approximately 50 feet, such that the flow of fire suppressant exiting the dispensing end is not affected by the air stream produced by the airborne vehicle, e.g., helicopter. Thus, since King does not teach or suggest all of the limitations recited in independent claim 1, Applicant respectfully submits that King does not anticipate Applicant's invention as recited in independent claim 1.

Therefore, for the reasons given above, independent claim 1 is believed to be distinguishable from King and therefore is not anticipated nor rendered obvious by King.

Dependent claims 3, 5, 10 and 11 are believed to be allowable as depending from what is believed to be allowable independent claim 1 for the reasons given above. In addition, claims 3, 5, 10 and 11 recite further limitations that distinguish over the applied art. In conclusion, it is respectfully submitted that claims 1, 3, 5, 10 and 11 are not anticipated nor rendered obvious by King and are therefore allowable.

B. Rejection of claims 1, 7, 10 and 11

The Examiner rejected claims 1, 7, 10 and 11 under 35 U.S.C. § 102(b) as being anticipated by Manicidae.

Specifically, the Examiner stated that

Manicidae et al. shows a dispersal system for fire suppression material for use with an airborne craft, the system comprising a vessel A holding fire suppressant, the vessel being secured within or adjacent to an airborne craft, a dispenser 5 for controllably dispensing the material from the vessel, and a conduit 13 having a first end secured in fluid communication with the vessel and a second end for controllably directing the dispensed material adjacent to ground level, wherein the dispenser non-symmetrically directs material in a direction from a central axis as recited in claim 7.

Applicant respectfully traverses the rejection of claims 1, 7, 10 and 11 under 35 U.S.C. § 102(b).

Manicatide, as understood, is directed to a system for dispensing particulate materials from an airplane.

In contrast, independent claim 1 recites a dispersal system for fire suppression material for use with an airborne craft, the system comprising: a vessel holding at least one fire suppressant material therein, the vessel being secured within or adjacent to an airborne craft; a dispenser for controllably dispensing the at least one fire suppressant material from the vessel; and a flexible conduit, the conduit having a first end secured in fluid communication with the vessel and a second end disposed sufficiently remote from the airborne craft for flow of the dispensed material to be substantially unaffected by an air stream associated with operation of the airborne craft, the second end adapted for controllably directing the dispensed material adjacent to ground level. (emphasis added)

Several of the features recited by Applicant in independent claim 1 is not taught or suggested by Manicatide. First, Manicatide does not teach or suggest a flexible conduit as recited by Applicant in independent claim 1, as amended. Manicatide teaches a rigid receptacle including an inlet, box portion and diffuser for distributing solid materials. (see Figure 1). The Minicatide construction contains features that have varying slopes and various curved profiles that can influence the flow characteristics of the materials. (see col. 1, lines 64 through col. 2, line 3). Therefore, the Minicatide construction must remain rigid, because varying the shape of the distributor or other features likewise change flow characteristics of materials flowing therefrom. Second, Manicatide does not teach or suggest a second end of a conduit disposed sufficiently remote from the airborne craft for flow of the dispensed material to be substantially unaffected by an air stream associated with operation of the airborne craft. As shown in the figures, the entire Manicatide construction is disposed adjacent to the aircraft. In addition, Manicatide specifically teaches in the Summary of the Invention:

The device, according to the invention, comprises a receptacle for the materials to be spread, and a distributor, traversed by an air current in the flying direction.

(emphasis added). In other words, Manicatide relies on the air stream associated with operation of the airplane to properly function, and more correctly, to function at all. In contrast, paragraph [0029] of the present invention discloses an approximate range of length of conduit, approximately 50 feet, such that the flow of fire suppressant exiting the dispensing end is not affected by the air stream produced by the airborne vehicle, e.g., helicopter. Thus, since Manicatide does not teach or suggest all of the limitations recited in independent claim 1, Applicant respectfully submits that Manicatide does not anticipate Applicant's invention as recited in independent claim 1.

Therefore, for the reasons given above, independent claim 1 is believed to be distinguishable from Manicatide and therefore is not anticipated nor rendered obvious by Manicatide.

Dependent claims 7, 10 and 11 are believed to be allowable as depending from what is believed to be allowable independent claim 1 for the reasons given above. In addition, claims 7, 10 and 11 recite further limitations that distinguish over the applied art. In conclusion, it is respectfully submitted that claims 1, 7, 10 and 11 are not anticipated nor rendered obvious by Manicatide and are therefore allowable.

C. Rejection of claims 1, 4-6 and 8-10

The Examiner rejected claims 1, 4-6 and 8-10 under 35 U.S.C. § 102(b) as being anticipated by Waldrum.

Specifically, the Examiner stated that

Waldrum shows a dispersal system for fire suppression material for use with an airborne craft, the system comprising a vessel holding fire suppressant, the vessel being secured within or adjacent to an airborne craft, a dispenser (comprising 16 and 18) for controllably dispensing the material from the vessel, and a conduit 38 having a first end secured in fluid communication with the vessel and a second end for controllably directing the dispensed material adjacent to ground level, wherein the dispenser has a plurality of vanes 132 as recited in claim 4 and the dispenser rotates as recited in claim 6.

Applicant respectfully traverses the rejection of claims 1, 4-6 and 8-10 under 35 U.S.C. § 102(b).

Waldrum, as understood, is directed to a centrifugal applying device for use with an aircraft.

In contrast, independent claim 1 recites a dispersal system for fire suppression material for use with an airborne craft, the system comprising: a vessel holding at least one fire suppressant material therein, the vessel being secured within or adjacent to an airborne craft; a dispenser for controllably dispensing the at least one fire suppressant material from the vessel; and a flexible conduit, the conduit having a first end secured in fluid communication with the vessel and a second end disposed sufficiently remote from the airborne craft for flow of the dispensed material to be substantially unaffected by an air stream associated with operation of the airborne craft, the second end adapted for controllably directing the dispensed material adjacent to ground level. (emphasis added)

Several of the features recited by Applicant in independent claim 1 is not taught or suggested by Waldrum. First, Waldrum does not teach or suggest a flexible conduit as recited by Applicant in independent claim 1, as amended. Waldrum teaches a plate in communication with a pair of rigid star wheel applicators having wind contacting paddles that are urged to rotate in response to the wind forces generated by the flying aircraft (see Figures). The Waldrum construction must retain its shape, i.e., due to rigid construction, to withstand the air stream produced by an aircraft, and must also retain its shape for the moving parts to function properly. Second, Waldrum does not teach or suggest a second end of a conduit disposed sufficiently remote from the airborne craft for flow of the dispensed material to be substantially unaffected by an air stream associated with operation of the airborne craft. As shown in the figures, the entire Waldrum construction is disposed adjacent to the aircraft. In addition, Waldrum specifically teaches in the Abstract:

Each nozzle is formed with an enlarged, planar paddle on one side in position to be impinged by wind forces to rotate the star wheel applicators as the aircraft flies.

(emphasis added). In other words, Waldrum relies on the air stream associated with operation of the airplane to properly function, and more correctly, to function at all. In contrast, paragraph [0029] of the present invention discloses an approximate range of length of conduit, approximately 50 feet, such that the flow of fire suppressant exiting the dispensing end is not affected by the air stream produced by the airborne vehicle, e.g., helicopter. Thus, since Waldrum does not teach or suggest all of the limitations recited in independent claim 1, Applicant respectfully submits that Waldrum does not anticipate Applicant's invention as recited in independent claim 1.

Therefore, for the reasons given above, independent claim 1 is believed to be distinguishable from Waldrum and therefore is not anticipated nor rendered obvious by Waldrum.

Dependent claims 4-6 and 8-10 are believed to be allowable as depending from what is believed to be allowable independent claim 1 for the reasons given above. In addition, claims 4-6 and 8-10 recite further limitations that distinguish over the applied art. In conclusion, it is respectfully submitted that claims 1, 4-6 and 8-10 are not anticipated nor rendered obvious by Waldrum and are therefore allowable.

Rejection under 35 U.S.C. 103

A. Rejection of claim 2

The Examiner rejected claim 2 under 35 U.S.C. § 103(a) as being unpatentable over King.

Specifically, the Examiner stated that

Since the dispenser of King extends from beneath the airborne craft, the amount of the extension as recited would have been a matter of design choice.

Applicant respectfully traverses the rejection of claim 2 under 35 U.S.C. § 103(a).

King, as understood, is directed to apparatus for distributing fire preventing and extinguishing composition from an airplane, as previously discussed.

Dependent claim 2 is believed to be allowable as depending from what is believed to be allowable independent claim 1 for the reasons given above. In addition, claim 2 recites further

limitations that distinguish over the applied art. In conclusion, it is respectfully submitted that claim 2 is not anticipated nor rendered obvious by King and is therefore allowable.

B. Rejection of claim 12

The Examiner rejected claim 12 under 35 U.S.C. § 103(a) as being unpatentable over King, Manicidae or Waldrum.

Specifically, the Examiner stated that

Dispensing the material from ground level to about three hundred feet above ground level would have been an obvious matter of user choice based on desired coverage.

Applicant respectfully traverses the rejection of claim 12 under 35 U.S.C. § 103(a). King, Manicidae or Waldrum have been previously discussed above.

Dependent claim 12 is believed to be allowable as depending from what is believed to be allowable independent claim 1 for the reasons given above. In addition, claim 12 recites further limitations that distinguish over the applied art. In conclusion, it is respectfully submitted that claim 12 is not anticipated nor rendered obvious by King and is therefore allowable.

Allowable Subject Matter

The Examiner objected to claims 13-15 as being dependent upon a rejected base claim, but indicated that the claims would be allowable, if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant appreciates the Examiner's indication of allowable subject matter, but believes that all of the claims are allowable for the reasons given above.

Applicant requests rejoinder of the claims previously withdrawn by the Examiner.

CONCLUSION

In view of the above, Applicant respectfully requests reconsideration of the Application and withdrawal of the outstanding objections and rejections. As a result of the remarks presented herein, Applicant respectfully submits that claims 1-15 are not anticipated by nor rendered

obvious by King, Manicatide, Waldrum or their combination and thus, are in condition for allowance. As the claims are not anticipated by nor rendered obvious in view of the applied art, Applicant requests allowance of claims 1-15 in a timely manner. If the Examiner believes that prosecution of this Application could be expedited by a telephone conference, the Examiner is encouraged to contact the Applicant.

The Commissioner is hereby authorized to charge any additional fees and credit any overpayments to Deposit Account No. 50-1059.

Respectfully submitted,
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